

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

**INFORMATION DISCLOSURE  
STATEMENT**

Docket Number  
10052/4601

Application Number  
**10/769,599**

Filing Date  
**January 30, 2004**

Examiner  
**Not Yet Assigned**

Art Unit  
**Not Yet Assigned**

Invention Title

**IMPROVEMENT OF OLED EFFICIENCY BY  
UTILIZATION OF DIFFERENT DOPING  
CONCENTRATIONS WITHIN THE DEVICE  
EMISSIVE LAYER**

Inventor(s)  
**ADAMOVICH et al.**

Address to:  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

Date: 4/8/04

Signature:

Thomas F. Meagher (Reg. No. 29,831)

1. In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance with the procedures of 37 C.F.R. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicants hereby bring the following references to the attention of the Examiner. The references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.
2. A copy of each patent, publication or other information listed on the modified PTO form 1449 is enclosed, unless otherwise indicated.
3. It is believed that no fees are due in connection with this Information Disclosure Statement. However, should any fees be due, the Commissioner is authorized to charge Deposit Account No. 11-0600 for such fees. A duplicate copy of this communication is enclosed for charging purposes.

Dated: 4/8/04

By:

Thomas F. Meagher (Reg. No. 29,831)

KENYON & KENYON  
One Broadway  
New York, NY 10004  
(212) 425-7200 telephone  
(212) 425-5288 facsimile

© Kenyon & Kenyon 2003

**Customer No. 26646**

APR 12 2004

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT  
PTO-1449**

DOCKET NO.	10052/4601	SERIAL NO.
ADAMOVICH et al.		10/769,599

FILING DATE	January 30, 2004	GROUP
		Not Yet Assigned

## U. S. PATENT DOCUMENTS

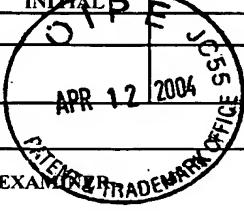
EXAMINER INITIAL	PATENT NUMBER	PUBLICATION DATE	NAME	CLASS	SUBCLASS	FILING DATE
	4,769,292	September 6, 1988	Tang et al.			
	5,247,190	September 21, 1993	Friend et al.			
	5,703,436	December 30, 1997	Forrest et al.			
	5,707,745	January 13, 1998	Forrest et al.			
	5,834,893	November 10, 1998	Bulovic et al.			
	5,844,363	December 1, 1998	Gu et al.			
	6,013,982	January 11, 2000	Thompson et al.			
	6,087,196	July 11, 2000	Sturm et al.			
	6,091,195	July 18, 2000	Forrest et al.			
	6,097,147	August 1, 2000	Baldo et al.			
	6,294,398	September 25, 2001	Kim et al.			
	6,303,238	October 16, 2001	Thompson et al			
	6,310,360	October 30, 2001	Forrest et al.			
	6,337,102	January 8, 2002	Forrest et al.			
	6,468,819	October 22, 2002	Kim et al.			
	2002/0034656	March 21, 2002	Thompson et al.			
	2002/0182441	December 5, 2002	Lamansky et al.			
	2003/0230980	December 18, 2003	Forrest et al.			
	2003/0072964	April 17, 2003	Kwong et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 02/074015	September 19, 2002	PCT				

## OTHER DOCUMENTS

EXAMINER INITIAL		AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
	'	Baldo et al., "Highly Efficient Phosphorescent Emission from Organic Electroluminescent Devices," Nature, vol. 395, 151-154 (1998)
	'	Baldo et al., "Very high-efficiency green organic light-emitting devices based on electrophosphorescence," Applied Physics Letters, Vol. 75, No. 1, (1999).
	-	Adachi et al., "Nearly 100% Internal Phosphorescent Efficiency in an Organic Light Emitting Device", J. Appl. Phys., 90, 5048 (2001)
	-	Adachi, et al., "High-efficiency organic electrophosphorescent devices with tris (2-phenylpyridine) iridium doped into electron-transporting materials," Applied Physics Letters, Vo. 77, No. 6 (2000).
	-	Baldo et al., « Transient Analysis of organic electrophosphorescence : I. Transient analysis of triplet energy transfer », Physical Review B, 2000, 62(16), pp. 10958-10966.
		Lu et al., U.S. Patent Application Serial No. 09/931,948., filed August 20, 2001, entitled "Transparent

EXAMINER INITIAL		AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
		Electrodes". Shtein et al., U.S. Patent Application Serial No. 10/233,470, filed September 4, 2002, entitled "Process and Apparatus for Organic Vapor Jet Deposition".
EXAMINER	TRADEMARK OFFICE	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		